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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,396	11/25/2003	Gon Kim	K-0561	4268

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EXAMINER	
HECKERT, JASON MARK	
ART UNIT	PAPER NUMBER
1746	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/720,396	KIM ET AL.	
	Examiner	Art Unit	
	Jason Heckert	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/10/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/10/07 have been fully considered but they are not persuasive. Applicant's arguments seem to focus on the fact that Hardaway has not disclosed an advantage or requirement for positioning a pipe in a diagonal or slanted manner. Examiner would like to point to the fact that the applicant's disclosed motivation for orienting the hose 72 at a slant is so that water may flow down and out of the hose. This motivation isn't novel, as it is rooted in well-known Newtonian physics. Furthermore, Hardaway does disclose that pipe 48 is oriented in a vertical manner as shown in figure 3. Hence, water would flow down this pipe due to the same gravitational forces acting on the applicant's disclosed invention thereby causing water to evacuate pipe 48 into the dispensers. Hence, the examiner believes that Hardaway's pipe, oriented in a vertical manner, is a functional equivalent to the applicant's invention. Would slight variations in pipe orientation be patentably distinct if both orientations achieve the same function of expunging fluid due to gravitational forces? Examiner strongly feels that they would not. Furthermore, orienting pipes at a slant is known, as shown by Hardaway's slant pipe 84. Although he does not disclose an advantage or requirement, one must agree that water would flow down that pipe to the drain 166. Since that is the case, then slant pipes and vertical pipes can be considered obvious modifications of one another. Lastly, an analogous bend occurs in the form of a right angle at the junction of pipe 48 with each dispenser protrusion. The corner near valve 72 best exemplifies this.

2. In regards to claims 5-8 and 13-16, Hardaway clearly discloses the arrangement of pipes as claimed (see figure 3). For example pipe 70 protrudes from dispenser 64 before the junction with pipe 48. There appears to be no distinct separation between elements and therefore reads on "built as a single body". The same can be said for pipe 40 and valve 44. Clearly the valve 44 is built into pipe 40, or vice versa, as there is not distinct separation of these elements. A portion of pipe 42 protrudes from the valve, before the junction with pipe 48, thereby reading on "pipe protruding from a front side of the inlet valve." Finally, it is clear the from the admitted state of the art (applicant's figure 1) that the applicant does not regard this as the novelty of their invention as these structures (25 and 29) are already disclosed in the related art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardaway. Hardaway et al. disclose a drum type washing machine with a tub 34 and a drum 35 rotatably installed in the tub. Also taught are water inlet valves 40 and 42 (for hot and cold water respectively) and a conduit 48 for connecting the water inlet to the wash aid dispensers 60, 62, and 64 wherein the connection between the water inlet and the conduit is higher than that connecting the conduit to the detergent box (Fig. 3).

Furthermore, the conduit is made of a material that can withstand varying degrees of water pressure and therefore can be considered stiff. Figure 3 depicts pipe 48 protruding from valves 44 and 45 and said pipe being built into the valve, or vice versa, allowing the passage of water. The opposite end of said pipe connects to protrusions 66, 68, and 70 that are built into dispensers 60, 62, and 64.

4. As stated above, Hardaway discloses a washing machine with a water inlet disposed above the detergent boxes. However, Hardaway does not distinctly describe the water conduit as bent or slant. In Figure 3, Hardaway depicts water recycling line 84 being both bent and slant before reaching nozzle 51. This structural orientation achieves the result of expelling remaining water out of pipe 84. Furthermore, the orientation of pipe 48 also allows remaining water to leave the pipe and also contains a bend before valve 72. As stated above, slant conduits and vertical conduits are obvious modifications of each other, in that both result in the evacuation of residual fluids due to gravitation forces. It would have been obvious to one of ordinary skill in the art at the time of the invention, to orient conduit 48 similarly to pipe 84 at a slant, as taught by Hardaway, as an alternative method of expelling remaining water in the conduit.

5. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardaway in view of the admitted state of the art (ASA). Hardaway does show an external water supply 40 connected to an inlet valve 44, implying some sort of inherent connection. Furthermore, as shown in figure 1 of the application, a third connecting part 31 connected to external supply hose 30 is connected to the valve 28. This part appears to be structurally equivalent to part 73 of the claimed invention. Therefore, it

was known at the time of the invention to include a connection between the inlet valve and the external water supply, thereby allowing fluid to flow from an external source to the machine. Hardaway does not distinctly say that all of the elements are contained within the frame of the washing machine; however, this is rather common in the art as shown by the ASA. Part 31 is shown as being disposed within a cabinet of the washing machine connecting the internal fluid conduits to the external conduit. It would have been obvious at the time of the invention, to modify Hardaway and enclose all of the components of the apparatus within the frame of the washing machine along with means for connection to an external water supply, as this is commonly done as shown by the ASA.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH

MICHAEL BARR
SUPERVISORY PATENT EXAMINER